

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/41459

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12Q 1/00; G01N 33/53; C07K 14/00  
US CL : 435/ 4, 6, 7.1; 530/ 324, 350

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 435/ 4, 6, 7.1; 530/ 324, 350

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,616,698 A (KREPINSKY et al.) 1 April 1997, see entire patent, especially col. 2, line 35-top of col. 4; col. 5; col. 19-30.	1-17, 26
Y		18
X	ROSE et al., "Stepwise Solid-Phase Syntheses Of Polyamide Linkers", JACS Vol. 121, No. 30 (1999), pages 7034-7038, see entire article.	1-17, 19-24 and 26
Y		18, 25
Y	CANNE et al., "Solid Phase Protein Synthesis By Chemical Ligation Of Unprotected Peptide Segments In Aqueous Solution", The 1997 Peptide Symposium, Nashville, Tennessee, June 14-19 1997, pages 1-6, see entire article.	1-17, 19-24, 26
Y	XU et al., "Chemical Ligation Of Folded Recombinant Proteins: Segmental Isotopic Labeling Of Domains For NMR Studies", PNAS USA, Vol. 96 (1/99) pages 388-393, see entire article.	18 and 25
A	DAWSON et al., "Synthesis Of Proteins By Native Chemical Ligation", Science, Vol. 266 (Nov. 4, 1994) pages 776-779, see entire article.	1-26

Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

22 November 2004 (22.11.2004)

Date of mailing of the international search report

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**INTERNATIONAL SEARCH REPORT**

PCT/US02/2459

**BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING**

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-17, drawn to method of producing chemically modified compounds.

Group II, claim(s) 18, drawn to method of producing a library of chemically-modified compounds.

Group III, claim(s) 19-24, drawn to method of producing chemically modified ligated polypeptides.

Group IV, claim(s) 25, drawn to method of producing a library of chemically modified ligated polypeptides.

Group V, claim(s) 26, drawn to a kit.

**Continuation of B. FIELDS SEARCHED Item 3:**

West: PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD;

STN: CAPLUS



(84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.